



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/056,208 | 01/28/2002 | Rolf Eckmiller | 39491-177858 | 6905 |

26694 7590 09/24/2004

VENABLE, BAETJER, HOWARD AND CIVILETTI, LLP
P.O. BOX 34385
WASHINGTON, DC 20043-9998

EXAMINER

LAYNO, CARL HERNANDZ

ART UNIT PAPER NUMBER

3762

DATE MAILED: 09/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/056,208

Applicant(s)

ECKMILLER, ROLF

Examiner

Carl H. Layno *Carl H. Layno* 9/22/2004

Art Unit

3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2002.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
4a) Of the above claim(s) 1-6 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 7-11 and 13 is/are rejected.
7) ☒ Claim(s) 12 and 14-22 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 28 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/26/02.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Preliminary Amendments

1. Acknowledgment is made of applicant's preliminary amendment which were received by the Office on January 28, 2002 and on March 26, 2002.
2. Claims 1-6 are canceled. Claims 7-22 have been added and are active.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

4. Acknowledgment is made of applicant's Information Disclosure Statement (PTO-1449) which was received by the Office on March 26, 2002.

Oath/Declaration

5. Acknowledgment is made of applicant's signed Declaration, which was received by the Office on March 26, 2002.

Drawings

Art Unit: 3762

6. Applicant's drawings, which were submitted on January 28, 2002, are informal and are acceptable for examination purposes only.

Specification

7. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Specifically, in line 1 of the Abstract, the Applicant should refrain from using the term "The invention". In addition, if the applicant intends to leave reference numerals present, the Examiner recommends that all numerals be surrounded by parenthesis (for consistency).

8. Applicant's specification is objected to for failing to provide proper headers for its sections as per 37 CFR 1.77(b). Specifically, **headers for sections (e) thru (h) (below) are missing.**

9. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.

Art Unit: 3762

- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not-submitted as an electronic document on compact disc).

Claim Objections

10. Claims 12-20 are objected to because of the following informalities:

-Claims 12, 13, and 14, as written, depend from canceled claim 1. Claims 15-20, which depend from these claims, are also objected to. For the purposes of this action, the Examiner is assuming that the applicant meant claims 12-14 depended from claim 7.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 3762

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

12. Claims 7, 8, and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Greenberg et al '134-A1.

The Greenberg et al '134-A1 U.S. Patent Application Publication describes the features of an implantable retinal prosthesis system (Fig.3b) including an electrode array **325** embedded within the eyeball overlaying the retina, which functions as applicant's claimed "internal functional unit" and an external unit (not totally shown) whose primary coil **321** is used for transferring telemetry signals via an electronic chip **20** and coils **323,314** to implanted electrode array **325**. See p.8, col.1, paragraphs [0126-0127].

Art Unit: 3762

In regard to claim 8, in Fig.3b, elements **323**, **320**, and **322** comprise the applicant's "at least one transmission element" and element **325** comprises applicant's "at least one reception element".

In regard to claim 13, primary coil **321**, part of the "external functional unit", is connected to an external PC, which is programmed to process signals. Applicant's attention is directed to Fig.17a, which shows the PC's main screen with signal processing buttons.

13. Claims 7, 9-11, and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Scribner '327.

The Scribner '327 patent discloses a retinal implant (Fig.6) located within a patient's eyeball next to retina **54**. The implant performs the function of applicant's claimed "internal functional unit" and comprises an electrode array **32**, a silicon multiplexer **34**, and a test device **30**. An external functional unit **25**, located outside of the eyeball, is electronically connected to the implant via a micro-cable **27**, which provides a signal path.

In regard to claims 10 and 11, the micro-cable **27** of Fig.6 appears to have an in-line connector (not labeled) inserted between segments of cable to the MUX array **30** and to the Isolated Breakout Box **98**.

In regard to claim 13, the "external functional unit" **25** processes signals for the display of real-time images and diagnostics on digital oscilloscope **93** (Fig.6).

14. Claims 7 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Nisch et al '573-A1.

Art Unit: 3762

The Nisch et al '573-A1 U.S Patent Application Publication describes a retina implant assembly having circuitry (Fig.2) configured for placement on the surface of the sclera **12** (Fig.6). This assembly performs the function of applicant's claimed "at least one external functional unit" and is electrically connected by extension **33** to a sub-retinal section **19** via an incision **25** in the sclera **12**. Element 19 is within the eyeball and is considered to perform the function of applicant's claimed "at least one internal functional unit".

Allowable Subject Matter

15. Claims 12 and 14-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

16. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a). **Formal drawings are now required.**

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The Michelson '933 patent describes a method and apparatus for visual prosthesis reading upon many of applicant's claimed features including an implanted retinal stimulator (Fig.6) (elements **26-37**) for placement within the eyeball next to the retina (see element **11** of

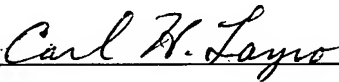
Art Unit: 3762

Fig. 1B) and a resonator coil 43. Coil 43 performs the function of applicant's claimed "external functional unit" since it is responsible for transmitting RF energy to the implanted stimulator over a wireless signal path and is located outside of the eye but next to it (col.5, lines 20-26). Unlike applicant's claimed device, however, the wireless path of Michelson does not pass data signals. Only RF energy is sent and received wirelessly.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carl H. Layno whose telephone number is (703) 308-3694. The examiner can normally be reached on Monday thru Thursday from 9 AM to 6 PM and every other Friday between 9AM and 5PM. A voice mail or E-mail message (carl.layno@uspto.gov) may be left if desired.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes, can be reached on (703) 308-5181. All faxed correspondence should be sent to the Office's new Official FAX number (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Legal Instruments Examiner (LIE) Brenda Webb whose telephone number is (703) 305-7520.



CARL LAYNO
PRIMARY EXAMINER

CHL
9/22/2004